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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/799,506	02/12/97	YAMAZAKI S	0756-1630

MM61/1203
SIXBEY FRIEDMAN LEEDOM AND FERGUSON
2010 CORPORATE RIDGE SUITE 600
MCLEAN VA 22102

EXAMINER	
WILCZEWSKI,M	
ART UNIT	**PAPER NUMBER**
2822	22

DATE MAILED: 12/03/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 08/799,506	Applicant(s) Yamazaki et al.
	Examiner M. Wilczewski	Group Art Unit 2822

☒ Responsive to communication(s) filed on *Feb 23, 1998; Feb 19, 1998; and Aug 12, 1998*.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims 8,9,12,13

☒ Claim(s) ~~8-15~~, *21-23, and 47-72* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) 8,9,12,13 is/are allowed.

☒ Claim(s) ~~8-15~~, *21-23, and 47-72* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). *20, 21*

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 08/330,797, filed on October 28, 1994.

Drawings

The drawings filed on October 28, 1994, have been objected to by the Draftsperson; note the form PTO-948 attached to Paper No. 4.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

Claims 8, 9, 12, 13, 21, 23, 55-57, 59, 60, 62-66, 71, and 72 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Zhang et al., U. S. Patent 5,352,291, newly cited.

Zhang et al. disclose an apparatus which anticipates the instant claims, see figure 2 and columns 6-7 (Example 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 47-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al., U. S. Patent 5,352,291, as applied supra.

Zhang et al. is applied as supra. Zhang et al. teach that the laser beam is adjusted with an optical system to have a rectangular cross section, at a predetermined width corresponding to that of the substrate and being elongated along a direction vertical to the direction in which the substrate is transported. Accordingly, the substrate can be continuously irradiated with the laser beam from edge to edge, see column 6, lines 47-55. Therefore, although Zhang et al. do not disclose the dimensions of the substrate or the cross section of the laser beam, given the disclosure of Zhang et al., it would have been obvious to one skilled in the art that the width of the laser beam is at least equal to the width of the substrate in order for the substrate to be irradiated with the laser beam from edge to edge. The specific dimensions claimed by Applicants do not patentably distinguish the claimed apparatus from that of Zhang et al. because Zhang et al.

teach the general concept of using a rectangular laser beam having a width at least equal to that of the substrate.

Claims 58 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al., U. S. Patent 5,352,291, as applied to claims 56 and 59, respectively, further in view of Begin et al., U. S. Patent 5,310,410, of record.

The Zhang et al. patent is applied as supra. Zhang et al. lack anticipation of using a robotic hand as a transferring means. Begin et al. disclose an apparatus for processing semiconductor wafers which includes satellite reaction chambers 60, 62, 64, and 66 disposed around the periphery of central chamber 14, see figure 1. A robot assembly 16 comprising arms 18, 20, and 22 is disposed in central chamber 14. Assembly 16 moves the substrate 12 to any position within the apparatus. Although Zhang et al. discloses an apparatus in which the chambers are connected in series, Zhang et al. teach that the apparatus can be modified to provide the chambers with a common room for supplying the substrate, see column 7, lines 3-6. In light of this teaching, it would have been obvious to one skilled in the art to use a robotic arm as disclosed by Begin et al. to transport the substrate between the processing chambers.

Claims 67-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al., U. S. Patent 5,352,291, as applied to claims 8, 55, 62, and 63, respectively.

Claims 67-70 recite that the semiconductor is crystallized by the irradiation of the laser light at the same time as the formation of an insulating layer. However, claims 8, 55, 63, and 63, from which claims 67-70 depend, are apparatus claims. A recitation with respect to the manner in

which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the structural limitations of that claimed. *Ex parte Masham*, 2 USPQ 2d 1647 (PTO Board of Appeals, 1987). Moreover, intended use has been continuously held not to be germane to determining the patentability of an apparatus. *In re Finsterwalder*, 168 USPQ 530 (CCPA 1971). The purpose to which an apparatus is put and expression relating apparatus to contents thereof during intended operation are not significant in determining patentability of an apparatus claim. *Ex parte Thibault*, 164 USPQ 666 (PTO Board of Appeals 1969). In addition, the inclusion of the material worked upon by an apparatus being claimed does not impart patentability to the claims. *In re Otto et al.*, 136 USPQ 458 (CCPA 1963).

Response to Arguments

Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additionally cited references disclose various types of cluster apparatuses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Wilczewski whose telephone number is (703) 308-2771.

M. Wilczewski
Primary Examiner
Tech Center 2800

MW
November 23, 1998